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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,943

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EXAMINER

VU, PHY ANH TRAN

ART UNIT

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2437

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12/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,943	Applicant(s) KATO ET AL.	
	Examiner PHY ANH VU	Art Unit 2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/16/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/06/2009 has been entered.

Response to Arguments

Applicant argues that Fraser fails to disclose that the client device is configured to "access the anti-tampering memory area and the non-volatile memory area in response to an access request via the common interface in the storage medium," "the common interface configured to issue a plurality of sequential responses to the access request," "an access for the non-volatile memory area arranged to be saved when the access request is made before a last response of the plurality of sequential responses," and "the access for the non-volatile memory area being performed after the last response reaches," as recited by amended claim 1.

Examiner respectfully disagrees. Fraser teaches these limitations at least in Fig. 2; column 13, line 30 to column 14, line 9. Also, see details of the rejection in claim 1 below.

Examiner Notes

Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner

Claim Objections

Claim 1 is objected to because of the following informalities:

Claim 1 recites "either one of the anti-tampering memory area **and** the non-volatile memory area..." in lines 11 and 13. The "and" should be replaced with "or". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, for new matter, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably

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convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites "a plurality of sequential responses to the access request" in line 15. According to Fig. 14 and paragraph [0072] of the specification, each access request or command has one corresponding response, NOT a plurality of responses as recited in the claim. Thus, this limitation introduces new matter.

Claims 2-8 are dependent on claim 1, and therefore inherit the 35 U.S.C 112, first paragraph issues of the independent claim 1.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "**an access** for the non-volatile memory area being arranged to be saved..." in lines 15-16. It is not clear how an access can be saved. For the purpose of expediting the prosecution process, examiner interprets "an access" as another access request.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Fraser (US 6,895,502 B1).

Regarding claim 1, Fraser discloses a remote access system comprising:
a server (*Fig. 1, element 12; Col 5, lines 8, 58; host computer or server*);
a client (*Fig. 1, element 14; Col 5, line 8; Col 8, line 38, client computer*);
device for conducting remote access to the server via a communication channel constituted between the client device and the server (*Fig. 1, element 15; Col 8, lines 38-43, LAN or WAN; Internet*); and

a storage medium comprising an anti-tampering memory area for storing authentication information used to constitute the communication channel and conduct the remote access (*Col 9, lines 7-9, 37-54; Col 11, lines 25-27; Nonvolatile storage (e.g., hard disk) and tamper-resistant packaging, which corresponds to anti-tampering memory area that contains private key of the client user*); and a non-volatile memory area for storing a program (*Col 8, line 64-67; Col 9, lines 1-6, the program memory stores program which is executed in ROM to protect from unauthorized modification*), the

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storage medium being connected to the client device (*Fig. 1, lines 12-16; wherein the smart card which corresponds to the storage medium is being connected to the client computer via a communication medium or pathway; also see "Response to Arguments" above*),

wherein

the storage medium comprises a common interface to be used by the client device to access either one of the anti-tampering memory area and the non-volatile memory area (*Fig 1, element 20; Col 9, lines 55-60; Reader*) and

the client device is configured to: (*Fig. 1, element 14; Col 7, lines 30-31; Col 8, line 38; terminal or computer*)

access the anti-tampering memory area and the non-volatile memory area in response to an access request via the common interface in the storage medium (*Fig 1, element 20; Col 9, lines 55-60; Reader*) , the common interface being configured to issue a plurality of sequential responses to the access request, an access for the non-volatile memory area being arranged to be saved when the access request is made before a last response of the plurality of sequential responses, and the access for the non-volatile memory area being performed after the last response reaches (*Fig. 2, column 13, line 20-column 14, line 9, wherein the process of responding to access request is performed sequentially*);

constitute the communication channel between the client device and the server by executing a program stored in the non-volatile memory area and by using the

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authentication information stored in the anti-tampering memory area (*Col 12, lines 4-20, wherein a communication channel is established between server and client device*)

conduct remote access to the server via the communication channel (*Fig. 1, element 15; Col 8, lines 38-43; internet*).

Regarding claim 5, Fraser also discloses the remote access system according to claim 1, wherein the client device is configured to store temporary data generated when executing a program in the client device, in the non-volatile memory area of storage medium (*Col 8, lines 59-63; RAM*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser.

Regarding claim 2, Fraser discloses the remote access system according to claim 1, wherein when access to the non-volatile memory area and access to the anti-tampering memory area conducted via the common interface in the storage medium compete with each other the client device is configured to control the competition (*Col 6,*

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lines 40-53, wherein client device accesses a resource. This implies that the client device has the capabilities to control which area of the resource it accesses first)

It is also obvious to one of ordinary skill in the art that when there are conflicting accesses to a common resource in a computer system that does not support parallel accesses, the computer system must have a mechanism that lines up the requests to access the resource, so that only one request will be executed at a time. Request with higher priority will be given access first.

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate this feature into the teachings of Fraser because it would provide for higher security in accessing the host computer or server (Col 4, lines 64-67; Col 5, lines 1-4).

Regarding claim 3, Fraser also discloses the remote access system according to claim 2, wherein the client device is configured to control the competition by conducting access to the non-volatile memory area and access to the anti-tampering memory area to be conducted via the common interface in the storage medium in a predetermined order (Col 6, lines 40-53; Col 8, lines 64-67; Col 9, lines 1-9, wherein since the client device has control over the competition, and authentication information is needed from the anti-tampering area to authenticate the client device before access to the server resource is given. Clearly, access to the anti-tampering area has priority over access to the non-volatile area, thus the anti-tampering area will be accessed first. This shows the predetermined order of accessing to the memory areas of the storage medium)

It is also obvious to one of ordinary skill in the art that when there are conflicting accesses to a common resource in a computer system that does not support parallel accesses, the computer system must have a mechanism that lines up the requests to access the resource, so that only one request will be executed at a time. Request with higher priority will be given access first.

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate this feature into the teachings of Fraser because it would provide for higher security in accessing the host computer or server (Col 4, lines 64-67; Col 5, lines 1-4).

Regarding claim 4, Fraser also discloses the remote access system according to claim 3, wherein the client device is configured to control the competition by executing access to the anti-tampering memory area to be conducted via the common interface in the storage medium in preference to access to the non-volatile memory area (Col 6, lines 40-53; Col 8, lines 64-67; Col 9, lines 1-9, 37-54, wherein in order for the client device to have access to the server resources, the client device must first be authorized using the authentication information stored in the anti-tampering area. This clearly shows that access to the anti-tampering memory area has higher priority than access to the non-volatile area, thus access to the anti-tampering should be accessed in preference to access to the non-volatile area)

It is also obvious to one of ordinary skill in the art that when there are conflicting accesses to a common resource in a computer system that does not support parallel

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accesses, the computer system must have a mechanism that lines up the requests to access the resource, so that only one request will be executed at a time. Request with higher priority will be given access first.

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate this feature into the teachings of Fraser because it would provide for higher security in accessing the host computer or server (Col 4, lines 64-67; Col 5, lines 1-4).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser, and further in view of Knegendorf et al (US 2003/0040929 A1, hereinafter Knegendorf).

Regarding claim 6, Fraser discloses the remote access system according to claim 1, wherein the non-volatile memory area in the storage medium is configured so as to be able to be accessed by the client device faster than the anti-tampering memory area (*Col 9, lines 1-9, wherein accessing to ROM is faster than accessing to anti-tampering memory area i.e. hard disk*)

Fraser does not disclose the storage medium retains a copy of the authentication information stored in the anti-tampering area, in the non-volatile memory area in the storage medium and the client device is configured to utilize the copied authentication information instead of the authentication information stored in the anti-tampering area.

However, Knegendorf discloses copying content data from one storage area (*nonvolatile*) to another storage area (*volatile*) and the user utilizes the copied content data (*volatile*) instead of the original content data ([0145], *this is because storing data in a volatile memory makes access to data faster*). *It is also known in the art to retain a copy of the information in the non-volatile area because accessing data from a faster volatile memory involves the risk of information loss in case of a power outage or volatile memory failure, so it is common practice to keep a copy of data in a non-volatile memory while the information is accessed from the faster volatile memory*)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify this feature of Knegendorf into the teachings of Fraser because it would provide for faster access to the information ([0145]).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser, and further in view of Ugajin (US 5,652,892).

Regarding claim 7, Fraser discloses the remote access system according to claim 1 (*Fig. 1, remote access system*),

Fraser does not disclose a controller connected to the server and the client device to manage a power supply of the server, wherein the client device is configured to access the controller and conducts power supply management of the server to be subject to the remote access.

However, Ugajin discloses a controller connected to the server and the client device to manage a power supply of the server (*Figs. 9 & 10*), wherein the client device accesses the controller and conducts power supply management of the server to be subject to the remote access (*Figs. 9 & 10; Col 6, lines 28-34, wherein the client device controls the power source of the server*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Ugajin into the teachings of Fraser because it would provide for a remote power source control method and apparatus capable of controlling remote power sources independently of network architectures. (*Col 1, lines 60-63*)

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser, and further in view of Gould et al (US 6,920,561 B1, hereinafter Gould).

Regarding claim 8, Fraser discloses the remote access system according to claim 1, wherein the storage medium is connected to the client device (*Fig. 1, lines 12-16; wherein the smartcard which corresponds to the storage medium is being connected to the client computer via a communication medium or pathway*),

client device for conducting remote access to the server via a communication channel constituted between the client device and the server (*Fig. 1, elements 14, 15; Col 5, lines 8; Col 8, lines 38-43, LAN or WAN; Internet*);

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remote access conducted by the client device using the communication channel
(*Fig. 1, element 15; Col 8, lines 38-43; internet*).

Fraser does not disclose the client device deletes information concerning the remote access.

However, Gould discloses the client device deletes information concerning the remote access (*Col 5, lines 44-47, wherein, the user credentials are deleted by the client device at the end of the session, which implies that communication is finished, and the connection between the client device and storage medium is canceled*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Gould into the teachings of Fraser because it would provide for the benefits and advantage of having a centralized entity to manage and control of all identification and credentials services (*Col 5, lines 48-64*).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHY ANH VU whose telephone number is (571)270-7317. The examiner can normally be reached on Mon-Thr 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PHY ANH VU/
Examiner, Art Unit 2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437